

REMARKS

This application has been reviewed in light of the Office Action dated February 1, 2006. Claims 1 – 6, 9, 10 and 11 are now presented for examination. Claims 12 – 16, 19 and 20 have been canceled. Claims 7, 8, 17 and 18 have been previously withdrawn. Claims 1, 10, and 11 have been amended to more particularly point out and distinctly claim the subject matter regarded as the invention. Support for these amendments is detailed in the remarks that follow. No new matter has been added.

Claims 1 and 11 are independent.

Favorable review is respectfully requested.

The Double Patenting objection:

Claims 12 – 16, 19 and 20 have been objected to by the Examiner under 37 CFR 1.75 as being a substantial duplicate of claims 2 – 6, 9 and 10.

Claims 12 – 16, 19 and 20 have been canceled thereby rendering their objection moot.

Drawings:

The drawings have been objected to by the Examiner under 37 CFR 1.83(a) for failure to show every feature of the invention specified in the claims. Specifically, the drawings failed to illustrate a heat sink attached to the heat spreader as recited in claims 10 and 20.

Claim 10 has been amended to, among other changes, remove the limitation of a heat sink attached to the heat spreader. Claim 20 has been canceled.

The §102 rejection:

Claims 1, 4, 9, 11, 14 and 19 have been rejected by the Examiner under 35 U.S.C. §102(a) as being anticipated by Japanese Patent No. 2004-172489 Naoto.

Claims 1 and 11 have been amended to more particularly claim that at least one of the semiconductor devices is a lower power density device and at least one of the semiconductor devices is a higher power density device and that the lower power density device has a reduced thickness, lower than the higher power density device. Support for this amendment is found at least in paragraph [0023].

The present invention provides a structure and method where the lower power density devices are thinned to insure that after the devices are mounted on the substrate, the higher power density devices will project above the lower power density devices. This limitation is not disclosed in the reference. Naoto does not teach or disclose a lower power density device and a higher power density device where the lower power density device is thinned to be thinner than the higher power density device. Accordingly, claims 1 and 11, as amended, are not anticipated by the reference.

Since claims 4 and 9 depend from claim 1, and since claim 1, as amended, is believed to be allowable, then claims 4 and 9 are believed to be allowable as well. Claims 14 and 19 have been canceled thereby rendering their rejection moot.

The §103 rejection:

Claims 2, 3, 12 and 13 have been rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 2004-172489 Naoto, in view of Patel, U.S. Patent No. 6,850,411.

Since claims 2 and 3 depend from claim 1, and since claim 1, as amended, is believed to be allowable, then claims 2 and 3 are believed to be allowable as well. Claims 12 and 13 have been canceled thereby rendering their rejection moot.

Claims 5, 10, 15 and 20 have been rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 2004-172489 Naoto, in view of Daves, U.S. Patent No. 6,292,369.

Since claims 5 and 10 depend from claim 1, and since claim 1, as amended, is believed to be allowable, then claims 5 and 10 are believed to be allowable as well. Claims 15 and 20 have been canceled thereby rendering their rejection moot. Claim 10 is further believed to be allowable, as amended, wherein the lower power density device is thinned to be approximately 120 microns thinner than the higher power density device. Support for this amendment is found at least in paragraph [0024]. Naoto does not teach or disclose the lower power density device being reduced in thickness to be approximately 120 microns thinner than the higher power density device. Accordingly, claim 10, as amended, is not anticipated by the reference.

Claims 6 and 16 have been rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 2004-172489 Naoto, in view of Iruvanti, U.S. Patent No. 5,098,609.

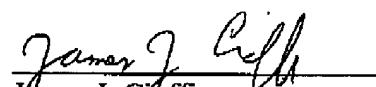
Since claim 6 depends from claim 1, and since claim 1, as amended, is believed to be allowable, then claim 6 is believed to be allowable as well. Claim 16 has been canceled thereby rendering its rejection moot.

Summary:

In view of all the preceding amendments and remarks, it is respectfully requested that any objections or rejections to this application be reconsidered and withdrawn. Further action with respect to the present application is earnestly solicited. If the Examiner finds this application is deficient in any respect, the Examiner is invited to contact the undersigned at the Examiner's earliest possible convenience.

For the foregoing reasons, allowance of the claims is respectfully solicited.

Respectfully submitted,  
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